







Crossroads Design for

6.28.10 release

**(VisProactive Diameter)**

* **VisProactive Diameter**

Version 1.0

Issued: 08/12/2014



This material is the exclusive property of, and confidential to, Syniverse Technologies, Inc.   
Any disclosure or reproduction of this material without Syniverse’s   
express prior ACC\_Rpt-WRitten consent is strictly prohibited.

The following product and service names, and the Syniverse name and logo are services, software products, service marks and/or trademarks of Syniverse Technologies, Inc.

|  |  |
| --- | --- |
| ACCESS S&E® | LAWBUST® |
| ACCESS® | PageNameSM |
| ACCESSibility® | Phone Me Anywhere Plus® |
| CCNSSM | PMA Plus® |
| CELLI® | RoamerXchange® |
| Commercial Carrier Network ServicesSM | SmartChallenge® |
| CrossroadsSM | SOLUTIONS® |
| EDTSM | Solutions Without Limits® |
| Electronic Data TransportSM | S.T.A.R.S. STREAMLINERTM |
| Encrypt-A-Key® | S.T.A.R.S. STREAMLINER Terminal Access Reporting System® |
| Fleet-On-TrackSM | STARS Special Thanks Awards for Remarkable Service® (logo) |
| Follow Me Roaming Plus® | STARS® |
| FraudInterceptor® | STARS® (logo) |
| FraudManager® | StatChek® |
| Fraud Resource CenterSM | STREAMLINER® |
| FraudX® | TransAction Manager® |
| GSM SS7 Transport® | Syniverse ConnectionsSM |
| InForum | Syniverse DataNetSM |
| inpackSM | UniRoamSM |
| INPort® | Visibility® |
| INPositionSM | WIN4SM\*\* |
| LATALinkSM |  |

Netscape and Netscape Communicator are registered trademarks of Netscape   
Communications Corporation.  
Microsoft and Windows are registered trademarks of Microsoft Corporation.  
Office and BackOffice are trademarks of Microsoft Corporation.

Used by Permission.

As used herein, ® denotes registration in the United States.

© Copyright 2008 Syniverse Technologies, Inc.  
All rights reserved under U.S. and International laws.[[1]](#footnote-1)‡

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Release Reason - Description of Changes | Author |
| 1.0 | 08/12/2014 | Initial Version | Marvin Gaurav |

Table of Contents

[1 Introduction 5](#_Toc386698818)

[1.1 Purpose 5](#_Toc386698819)

[1.2 Definitions, Acronyms, and Abbreviations 5](#_Toc386698820)

[1.3 Correction and Revisions 5](#_Toc386698821)

[2 Software Design 6](#_Toc386698822)

[2.1 High Level Design Details – Permission Level 6](#_Toc386698823)

[ For Non Syniverse Company 6](#_Toc386698824)

[ For Syniverse Company 6](#_Toc386698825)

[2.2 DB View for AMG Analyzer 7](#_Toc386698826)

[2.3 Detailed Permission Level Changes 7](#_Toc386698827)

[2.4 DNS entries 12](#_Toc386698828)

[2.5 Grant Perms 12](#_Toc386698829)

[3 Requirements Tracing Matrix 13](#_Toc386698830)

# Introduction

## Purpose

The purpose of this document is to explain the design of VisProactive Diameter

## Definitions, Acronyms, and Abbreviations

Table ; Terminology

| Acronyms and Abbreviations | Description |
| --- | --- |
| GUI | Graphical User Interface |
| CTP | Central Tables Provisioning |
| uid | unique identifier |
| ou | organizational unit (LDAP) |
| MDR | Mobile Data Roaming |

## Correction and Revisions

Please direct comments or suggestions for modification, preferably via email, to:

**Gaurav Sharma**

**813-637-5765**

[gaurav.sharma@syniverse.com](mailto:gaurav.sharma@syniverse.com)

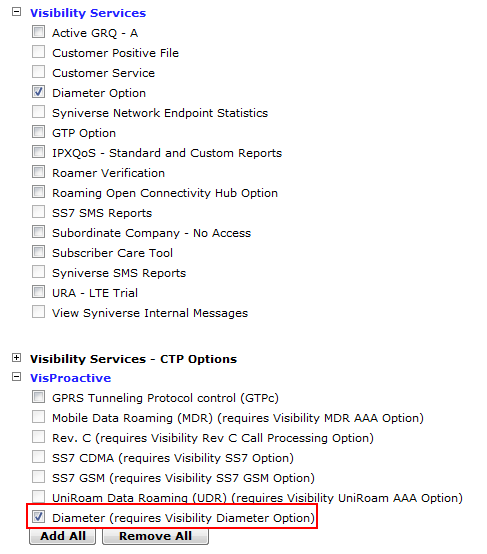
# Software Design

## High Level Design Details – Permission Level

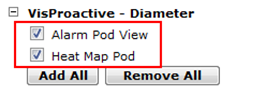
### For Non Syniverse Company

* **Company Permissions:**

**Diameter (requires Visibility Diameter Option)** is enabled only if **Diameter Option** is checked



* **User Permissions:**

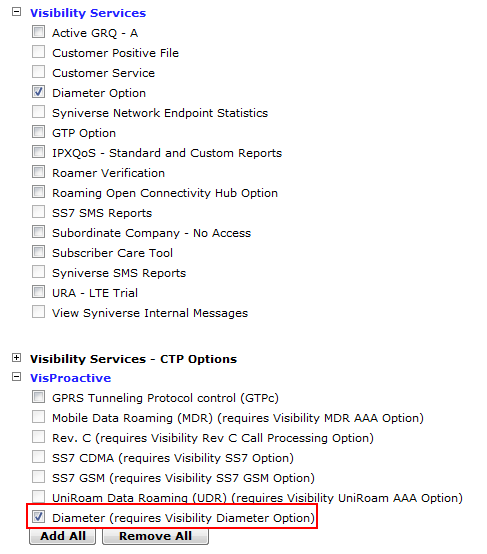


The Non-Syniverse company will get assigned “**VisPro\_Diameter\_cmpyP**” permission in the company\_resource table.

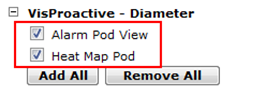
### For Syniverse Company

* **Company Permissions:**

**Diameter (requires Visibility Diameter Option)** is enabled only if **Diameter Option** is checked

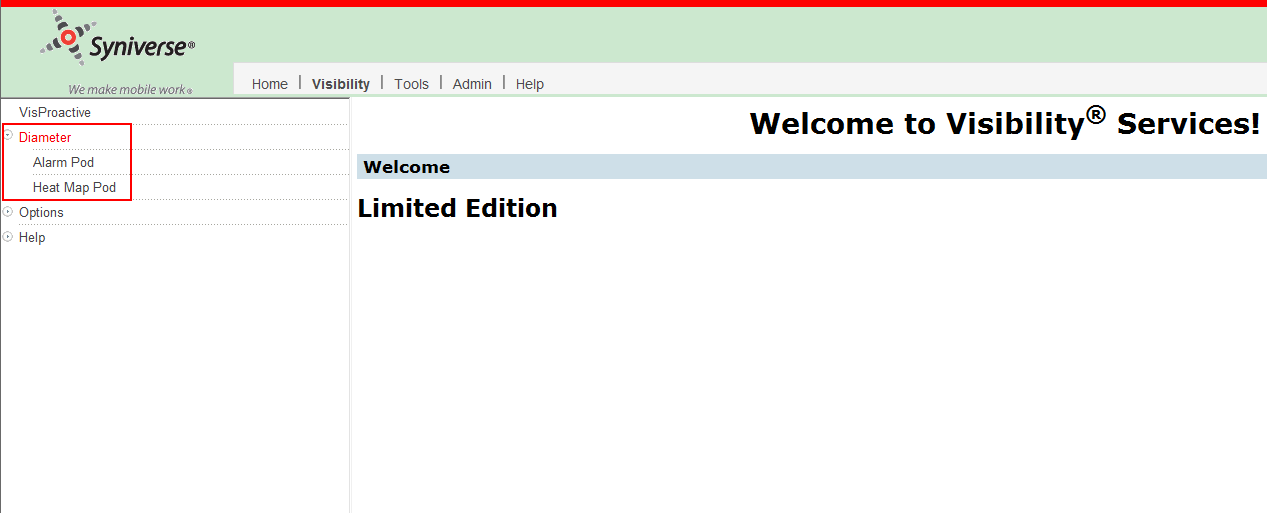


* **User Permissions:**



The Syniverse company will get assigned “**VisPro\_Diameter\_cmpyP**” permission in the company\_resource table.

User’s having user permission “**Alarm Pod View**” and/or “**Heat Map Pod**” under **“VisProactive - Diameter”** will see “Alarm Pod” and/or “Heat Map Pod” link respectively:



## Detailed Permission Level Changes

**New User Permission Group:**

**Permission Group Id:** VisPro\_Diameter\_userP

**Presentation Label:** VisProactive - Diameter

A new Permission Group resource will be added to the RESOURC table with RSRC\_ID: VisPro\_Diameter\_userP

This resource will link to a new presentation entry that will be added to the PRESENTATION table

- The PRSENTATION entry’s PRSNTTN\_ID is VisPro\_Diameter\_userP\_prsn

- The PRSENTATION entry will have label of " VisProactive - Diameter"

The presentation order will be: 02104

This Permission Group will have Presentation label tag :4408

An entry will also be added to the LDAP for this permission group under ou=PermissionGroups, o=Crossroads with attributes as described above

**New Company Permission:**

**Permission Id:** VisPro\_Diameter\_cmpyP

**Presentation Label:** Diameter (requires Visibility Diameter Option)

A new Permission resource will be added to the RESOURC table with RSRC\_ID: VisPro\_Diameter\_cmpyP

This resource will link to a new presentation entry that will be added to the PRESENTATION table

- The PRSENTATION entry’s PRSNTTN\_ID is VisPro\_Diameter\_cmpyP\_prsn

- The PRSENTATION entry will have label of " Diameter (requires Visibility Diameter Option) "

The presentation order will be: 0070

A Product relationship to the product resource, VisPro, will be added to the RSRC\_TO\_RSRC\_REL table for this resource so that the Visibility tab will be displayed for any users that are assigned this permission

A PermissionGroup relationship to the new permissionGroup resource, VisProactive\_Co, will be added to the RSRC\_TO\_RSRC\_REL table for this resource

Two Implied relationships to the permission resource, VisPro\_Co and VisPro\_Vis, will be added to the RSRC\_TO\_RSRC\_REL table for this resource

This Permission will have Presentation label tag :4409

This permission is applicable only for nonadmin company types

The Non-Syniverse company will get assigned this permission in company\_resource table.

An entry will also be added to the LDAP for this permission under ou=PermissionCode, o=Crossroads with attributes as described above

This Permission is dependent on **Diameter Option**. It is enabled only if **Diameter Option** is checked

**New User Permission:**

**Permission Id:** VisPro\_Diameter\_Alarm\_Pod\_View\_userP

**Presentation Label:** Alarm Pod View

A new Permission resource will be added to the RESOURC table with RSRC\_ID: VisPro\_Diameter\_Alarm\_Pod\_View\_userP

This resource will link to a new presentation entry that will be added to the PRESENTATION table

- The PRSENTATION entry’s VisPro\_Diameter\_Alarm\_Pod\_View\_userP\_prsn

- The PRSENTATION entry will have label of " Alarm Pod View "

A Copermission relationship the new permission resource, VisPro\_Diameter\_cmpyP will be added to the RSRC\_TO\_RSRC\_REL table for this resource

The presentation order will be: 0010

A Product relationship to the product resource, VisSvc, will be added to the RSRC\_TO\_RSRC\_REL table for this resource so that the Visibility tab will be displayed for any users that are assigned this permission

A PermissionGroup relationship to the new permissionGroup resource, VisPro\_Diameter\_userP, will be added to the RSRC\_TO\_RSRC\_REL table for this resource

Two Implied relationships to the permission resource, VisPro and VisPro\_Vis, will be added to the RSRC\_TO\_RSRC\_REL table for this resource

This Permission will have Presentation label tag :4410

An entry will also be added to the LDAP for this permission under ou=PermissionCode, o=Crossroads with attributes as described above

**New User Permission:**

**Permission Id:** VisPro\_Diameter\_Heat\_Map\_Pod\_View\_userP

**Presentation Label:** Heat Map Pod

A new Permission resource will be added to the RESOURC table with RSRC\_ID: VisPro\_Diameter\_Heat\_Map\_Pod\_View\_userP

This resource will link to a new presentation entry that will be added to the PRESENTATION table

- The PRSENTATION entry’s VisPro\_Diameter\_Heat\_Map\_Pod\_View\_userP\_prsn

- The PRSENTATION entry will have label of "Heat Map Pod"

A Copermission relationship the new permission resource, VisPro\_Diameter\_cmpyP will be added to the RSRC\_TO\_RSRC\_REL table for this resource

The presentation order will be: 0020

A Product relationship to the product resource, VisSvc, will be added to the RSRC\_TO\_RSRC\_REL table for this resource so that the Visibility tab will be displayed for any users that are assigned this permission

A PermissionGroup relationship to the new permissionGroup resource, VisPro\_Diameter\_userP, will be added to the RSRC\_TO\_RSRC\_REL table for this resource

Two Implied relationships to the permission resource, VisPro and VisPro\_Vis, will be added to the RSRC\_TO\_RSRC\_REL table for this resource

This Permission will have Presentation label tag :4411

An entry will also be added to the LDAP for this permission under ou=PermissionCode, o=Crossroads with attributes as described above

**New Menu Group:**

**Id:** VisPro\_Diameter\_Menu\_prsn

**Presentation Label:** Diameter

A new Menu Group resource will be added to the RESOURC table with RSRC\_ID VisPro\_Diameter\_Menu

This resource will link to a new presentation entry that will be added to the PRESENTATION table

- The PRSENTATION entry’s VisPro\_Diameter\_Menu\_prsn

- The PRSENTATION entry will have label of "Diameter"

This menu group is visible on the crossroads application when the logged in user has the **Permission Id:** VisPro\_Diameter\_Alarm\_Pod\_View\_userP and/or VisPro\_Diameter\_Heat\_Map\_Pod\_View\_userP

This Permission will have Presentation label tag :4412

An entry will also be added to the LDAP for this menu under ou=PresentationObjects, o=Crossroads with attributes as described above

**New Menu Item:**

**Id:** VisPro\_Diameter\_Alarm\_Pod\_menuitem\_prsn

**Presentation Label:** Alarm Pod

A new Menu Item resource will be added to the RESOURC table with RSRC\_ID VisPro\_Diameter\_Alarm\_Pod\_menuitem

This resource will link to a new presentation entry that will be added to the PRESENTATION table

- The PRSENTATION entry’s VisPro\_Diameter\_Alarm\_Pod\_menuitem\_prsn

- The PRSENTATION entry will have label of "Alarm Pod"

This menu item is visible on the crossroads application when the logged in user has the **Permission Id:** VisPro\_Diameter\_Alarm\_Pod\_View\_userP

This menu item will have URL:null

This menu item is placed under the menu group id: VisPro\_Diameter\_Menu\_prsn

This menu item will have have **ONCLICK** value: **parent.NavFrame.openWindow('https://${VISPRO\_DIAMETER}/visproGUI/alert/index.html','AlarmPod','Alarm%20Pod')**

This Permission will have Presentation label tag :4413

An entry will also be added to the LDAP for this menu under ou=PresentationObjects, o=Crossroads with attributes as described above

**New Menu Item:**

**Id:** VisPro\_Diameter\_Heat\_Map\_Pod\_menuitem\_prsn

**Presentation Label:** Heat Map Pod

A new Menu Item resource will be added to the RESOURC table with RSRC\_ID VisPro\_Diameter\_Heat\_Map\_Pod\_menuitem

This resource will link to a new presentation entry that will be added to the PRESENTATION table

- The PRSENTATION entry’s VisPro\_Diameter\_Heat\_Map\_Pod\_menuitem\_prsn

- The PRSENTATION entry will have label of "Heat Map Pod"

This menu item is visible on the crossroads application when the logged in user has the **Permission Id:** VisPro\_Diameter\_Heat\_Map\_Pod\_View\_userP

This menu item will have URL:null

This menu item is placed under the menu group id: VisPro\_Diameter\_Menu\_prsn

This menu item will have have **ONCLICK** value: **parent.NavFrame.openWindow('https://${VISPRO\_DIAMETER}/visproGUI/diameterHeatmap/index.html','HeatMapPod','Heat%20Map%20Pod')**

This Permission will have Presentation label tag :4414

An entry will also be added to the LDAP for this menu under ou=PresentationObjects, o=Crossroads with attributes as described above

## DNS entries

These are the new DNS entries required

* VISPRO\_DIAMETER=vis-diameter-portal-dev-alt.syniverse.com [6.xx DEV]
* VISPRO\_DIAMETER=vis-diameter-portal-test-alt.syniverse.com [6.xx TEST]
* VISPRO\_DIAMETER=vis-diameter.syniverse.com [production]
* VISPRO\_DIAMETER=vis-diameter-portal-dev.syniverse.com [7.xx DEV]
* VISPRO\_DIAMETER=vis-diameter-portal-test.syniverse.com [7.xx TEST]

## Grant Perms

No grant Permissions

# Requirements Tracing Matrix

| Traceability Map  Messaging Subject Areas via Analyzer SMS (next gen) Reporting  <http://central.syniverse.com/sites/CUST/pm/PR_3543PMGAnalyzerReporting/Requirements/Forms/AllItems.aspx> | | |
| --- | --- | --- |
| For <Analyzer and PMG/AMG and Crossroads> | | |
| High Level Design | Detail Level Design | System Test Plan |
| <Link to HLD> | <Link to DLD> | <Link to System Test Plan> |

| Requirement  # | Requirement title | Asset/Team | HLD  # | DLD  # | Test  # | Comment |
| --- | --- | --- | --- | --- | --- | --- |
| 3 | FEATURE AND SUPPLEMENTAL REQUIREMENTS |  |  |  |  |  |
| 3.1 | ANALYZER REQUIREMENTS |  |  |  |  |  |
| 3.1.1 | Data from AMG to Analyzer |  |  |  |  |  |
| 3.1.1.1 | AMG Customer Identification |  |  |  |  |  |
| 3.1.2 | Custom Reports |  |  |  |  |  |
| 3.1.3 | Analyzer Spreadsheet |  |  |  |  |  |
| 3.1.4 | Subject Areas |  |  |  |  |  |
| 3.1.5 | Folders |  |  |  |  |  |
| 3.2 | DATA RETENTION REQUIREMENTS |  |  |  |  |  |
| 3.2.1 | Existing AMG Batch Reports |  |  |  |  |  |
| 3.2.2 | Subject Area Data Retention |  |  |  |  |  |
| 3.2.3 | Billing and Refund Area Data Retention |  |  |  |  |  |
| 3.2.4 | Back Populate PMG Archived Billing and Refund Files |  |  |  |  |  |
| 3.3 | CATALOG EXISTING BATCH REPORTS |  |  |  |  |  |
| 3.3.1 | AMG to Create Reports |  |  |  |  |  |
| 3.3.2 | Assign Report IDs |  |  |  |  |  |
| 3.3.3 | Report Filter Selection |  |  |  |  |  |
| 3.4 | CROSSROADS |  |  |  |  |  |
| 3.4.1 | Enable Analyzer AMG into Production Crossroads |  |  |  |  |  |
| 3.4.1.1 | Mobile Data Tab |  |  |  |  |  |
| 3.4.2 | Company Permissions | 2.1/2.2 |  |  |  |  |
| 3.4.2.1 | AMG Operator | 2.1/2.2 |  |  |  |  |
| 3.4.2.1.1 | AMG Operator Analyzer Access |  |  |  |  |  |
| 3.4.2.1.2 | AMG Operator ACCESSibility Access |  |  |  |  |  |
| 3.4.2.2 | AMG Aggregator | 2.1/2.2 |  |  |  |  |
| 3.4.2.2.1 | AMG Aggregator Analyzer Access |  |  |  |  |  |
| 3.4.2.2.2 | AMG Aggregator ACCESSibility Access |  |  |  |  |  |
| 3.4.2.3 | AMG Reseller | 2.1/2.2 |  |  |  |  |
| 3.4.2.3.1 | AMG Reseller Analyzer Access |  |  |  |  |  |
| 3.4.2.3.2 | Multiple Resellers |  |  |  |  |  |
| 3.4.3 | User Permissions | 2.1/2.2 |  |  |  |  |
| 3.4.3.1 | AMG Operator User Permission | 2.1/2.2 |  |  |  |  |
| 3.4.3.1.1 | Operator Analyzer Subject Area Access |  |  |  |  |  |
| 3.4.3.1.2 | Operator ACCESSibility Access |  |  |  |  |  |
| 3.4.3.2 | AMG Aggregator User Permission | 2.1/2.2 |  |  |  |  |
| 3.4.3.2.1 | Aggregator Analyzer Subject Area Access |  |  |  |  |  |
| 3.4.3.2.2 | Aggregator ACCESSibility Access |  |  |  |  |  |
| 3.4.3.3 | AMG Reseller User Permission | 2.1/2.2 |  |  |  |  |
| 3.4.4 | Syniverse Permissions | 2.1/2.2 |  |  |  |  |
| 3.4.4.1 | Company Permission | 2.1/2.2 |  |  |  |  |
| 3.4.4.2 | User Permission | 2.1/2.2 |  |  |  |  |
| 3.4.5 | Help File |  |  |  |  |  |
| 3.5 | DOCUMENTATION AND TRAINING REQUIREMENTS |  |  |  |  |  |
| 3.5.1 | Documentation |  |  |  |  |  |
| 3.5.2 | Training |  |  |  |  |  |
| 3.6 | DATA SECURITY |  |  |  |  |  |
| 3.6.1 | Configure MNO/Reseller Relationship (Desired) |  |  |  |  |  |

1. [↑](#footnote-ref-1)